

AMENDMENTS TO THE CLAIMS

Following is a complete set of claims as amended with this Response. This complete set of claims includes amended claims 1 and 18.

1. (Currently Amended) ~~For use in an implantable medical device, a~~ A biocompatible, biostable, corrosion-resistant wire strand comprising: for a cardioverting and/or defibrillating coil electrode of an implantable cardiac lead, the wire strand comprising:

a core comprising a plurality of electrically conductive, low electrical resistance filaments embedded in an electrically conductive matrix; and
a low electrical resistance, substantially chemically inactive cladding discrete from the matrix.

2. (Original) The wire strand of claim 1 in which:
the core is substantially devoid of interstices.

3. (Original) The wire strand of claim 2 in which:
the core comprises a drawn filled tube (DFT).

4. (Original) The wire strand of claim 2 in which:
the core comprises a drawn brazed strand (DBS).

5. (Original) The wire strand of claim 1 in which:
the plurality of filaments comprise a material selected from the group consisting of silver, gold and a low electrical resistance conductive polymer.

6. (Original) The wire strand of claim 1 in which:
the matrix comprises a material selected from the group consisting of MP35N,
tantalum, titanium and niobium.

7. (Original) The wire strand of claim 1 in which:
the plurality of filaments comprise silver; and
the matrix comprises MP35N.

8. (Original) The wire strand of claim 7 in which:
the core comprises a $1 \times N$ strand, where $N =$ at least 2.

9. (Original) The wire strand of claim 8 in which:
 $N = 19$.

10. (Original) The wire strand of claim 7 in which:
the plurality of filaments comprise 10-35% by weight of the core.

11. (Original) The wire strand of claim 1 in which:
the cladding comprises a material selected from the group consisting of platinum,
iridium, rhodium, palladium and alloys thereof, including a platinum/iridium alloy.

12. (Original) The wire strand of claim 1 in which:
the filaments are braided.

13. (Previously Presented) An implantable cardiac lead for transmitting
electrical signals between an implantable medical device and selected body tissue in
the heart, the lead comprising:
a lead body having a proximal end and a distal end, the proximal end of the lead
body carrying a connector assembly connectable to the implantable medical device; and

at least one cardioverting and/or defibrillating coil electrode on the distal end of the lead body, the at least one cardioverting and/or defibrillating coil electrode being electrically connected to a terminal contact on the connector assembly, the at least one cardioverting and/or defibrillating coil electrode comprising a biocompatible, biostable, corrosion-resistant wire strand comprising (a) a core comprising a plurality of electrically conductive, low electrical resistance filaments embedded in an electrically conductive matrix and (b) a low electrical resistance, substantially chemically inactive cladding enclosing the core, the cladding being discrete from the matrix.

14. (Previously Cancelled)

15. (Previously Presented) The lead of claim 13 further comprising:
at least one pacing and/or sensing electrode.

16. (Previously Cancelled)

17. (Original) The lead of claim 13 in which:
the core of the wire strand is substantially devoid of interstices.

18. (Currently Amended) A wire strand comprising: for a cardioverting and/or defibrillating coil electrode of an implantable cardiac lead, the wire strand comprising:

a cladding layer comprising a material selected from the group consisting of platinum, a platinum/iridium alloy, iridium, rhodium and palladium; and

a drawn filled tube core comprising a plurality of filaments embedded in a matrix, each of the plurality of filaments comprising a material selected from the group consisting of silver, gold and a low electrical resistance conductive polymer, and the matrix comprising a material selected from the group consisting of MP35N, tantalum, titanium and niobium, the cladding layer being discrete from the matrix.

19. (Previously Presented) The lead of claim 13 in which:
the filaments are braided.
20. (Previously Presented) The wire strand of claim 18 in which:
the plurality of filaments are braided.